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ABSTRACT

Intended for use in college-level secondary education methods courses, the module describes various curriculum models for teaching learning disabled students by means of lecture notes (in text form), an annotated bibliography, and overhead masters. The introduction identifies the five models considered: (1) basic skills training, (2) tutorial, (3) functional skills training, (4) work study, and (5) strategies training. Each model is presented in terms of a description, a rationale, effectiveness information, and implications for secondary teachers. Following the model discussions, curriculum material modifications (e.g., combining standard text with other multisensory instructional materials) are considered. Finally, the regular education/special education initiative is discussed with emphasis on its impact on regular secondary-level teachers. Also provided are 14 references and 13 overhead masters. An additional annotated bibliography includes 28 references with abstracts. (DB)

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LD CURRICULUM MODELS INSTRUCTIONAL MODULE

(An Instructional Module for Preservice or Inservice Training of Regular Secondary Educators)

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Prepared Through A
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LD CURRICULUM MODELS

TEXT

INTRODUCTION

Curriculum offerings for the junior high school and senior high school LD student are often varied based on the individual needs of the student (Mercer, 1989). This reflects the heterogeneity of needs and motivation levels of learning disabled students, resource availability and sometimes, orientation of the specific program found in the high school. There are essentially five curriculum models that were initially identified by Alley and Deshler from the literature (Edgar, 1987; Halpern & Benz, 1987; Alley & Deshler, 1979; Lerner,1988; Gearheart & Gearheart, 1989). These include the basic skills model, the tutorial model, the functional skills model, the work study model, and the strategies model.

The first of these is basic skills instruction in which students receive training in their weak reading, writing and arithmetic skills. The second is tutorial instruction in which the students are given assistance in passing the academic content classes. The third model focuses on functional skills instruction. In this model students are taught the basic survival reading, writing and arithemtic skills necessary to be a productive citizen and live independently. In the work-study model which is the fourth approach to curriculum, LD adolescents are given career related skills and part time on the job

experience in a highly supervised manner. The learning strategies approach is the fifth approach in which students are taught "how to learn" by learning techniques to help them take in, store, and retrieve new information. these models will be covered in depth in the module.

In addition to these five basic models of service delivery at the secondary level, Gearheart & Gearheart (1989) delineated a compensatory approach where the learning environment is changed to allow the LD student to succeed and learn. Lerner (1988) described the use of collaborative consultation as a seventh option for curriculum planning. In Lerner's system regular classroom teachers and special education teachers collaborate on providing services on an equal basis. Both of these options are often used in conjunction with the first five models described initially. Many students receive services that incorporate a variety of the curriculum models. Each of these curriculum options will be covered in depth in this module along with a description of the regular teacher's role in the fulfillment of the curriculum guidelines.

In addition, this module will cover the regular education initiative and an overview of curriculum material adaptations. These topics reflect a national push towards mainstreaming of all handicapped children into the regular secondary classes.

BASIC SKILLS/REMEDIATION CURRICULUM MODEL

Description

The basic skills remediation model is designed to improve those skills in the academic areas that are hindering the student from successful completion of the regular high school subjects. This involves techniques that have been found successful in improving the basics of reading, arithmetic, spelling, and writing. In this approach, a careful analysis of the missing skills is completed. This is usually completed by administering individualized criterion referenced tests in each of these specific academic areas. An example would be a timed test of all of the multiplication facts to see which ones the student does not know specifically. These will tell which skills have not been learned or are not known at an automatic level. This refers to not only knowing the skills at 100% accuracy but also being able to relate the answers with a high degree of fluency or speed. When these specific skills are isolated, remedial teaching takes place to improve the LD student's reading, writing, and arithmetic skills.

This may involve using different instructional methods in these academic areas. Students are taught using materials at the level of their achieveemtn in the specific skill area (Gearheart & Gearheart, 1989). For example, in reading a variety of methods may be employed. Most students may have been taught reading using the

regular basals typically found in elementary schools. In the basic skills model, the LD student will be taught reading with programs that capitalize on their learning strengths. This may include such options as reading programs that are strictly phonetic, holistic, linguistic or multisensory. In the phonetic approach, the student would be taught to read by sounding out the words with an emphasis on sound/symbol relationships. In a holistic approach the student would be taught to read using whole stories with an emphasis on using the context of the passage to read the words. A linguistic approach focuses on teaching reading through a repetition of letter patterns and maintaining a repeating syntax pattern in the sentences. The multisensory approaches to reading focus on the use of all modalities to help the student read. Students are tuaght to trace(feel), see, hear, and say words as they are learned. In the remediation model, the focus is on repeated practice of weak skills until both mastery and fluency are achieved. Approaches to teaching students their missing skills are determined by looking at the student's strengths and weaknesses and selecting the best method for the child. The same type of procedure is used to teach in each of the basic skill areas.

This is the model most frequently used in elementary school programs for children with learning disabilities. It is increasingly receiving less emphasis in secondary schools.

Rationale for Model

The basic rationale for this model is that by improving weaknesses in basic skills, LD students will benefit from the regular high school curriculum (Gearheart & Gearheart, 1989). It is believed that if learners become more proficient in these skill areas, this will lead to success in academic content areas as well.

Effectiveness of Model

It has been found that there is very little growth in the basic skills in the high school years (Schumaker, Deshler, Alley, & Warner, 1983). Because of this, many researchers caution against the overuse of this approach in secondary programs. Mercer (1988) recommends the use of this approach through tenth grade for LD students who achieve below the fourth grade level to help improve the weak basic skill area. He further believes that remediation should be coupled with work in the other curriculum models.

There have, however, been some successful attempts to improve basic skills in high school students. These have usually been in intensive remediation programs (Buchwach, 1980; Dembrowsky, 1980).

Implications for Secondary Teachers

Secondary teachers who participate in these

remediation efforts are typically teaching high school composition or life skills mathematics courses. These teachers may be asked to reteach some of the missing skills that are noted among LD students. Secondary teachers would use a variety of methods to specifically diagnose the weak areas the students have in the specific academic areas and design lessons to modify these as described earlier. This would, however, be an exception to typical applications of this model where special education teachers provide instruction in a special education setting such as a resource room or in special substitute classes.

TUTORIAL INSTRUCTION CURRICULUM MODEL

Description

The tutorial instruction curriculum model is designed to help the LD student pass his or her individual content area classes (Lerner, 1988). In this model, the students spend the majority of the day in the mainstream courses in an attempt to achieve the regular credits necessary for graduation. Maher (1983), found that nearly half, 47 percent, of the secondary special education teachers spent most of their time following this approach.

Learning Disabled students, therefore, cover the same curriculum as their nonhandicapped peers with tutoring. This will generally involve individual practice

of the material covered in the content class in a special education placement. It may involve such things as the preparation of study guides for the LD student, modification of testing procedures, assistance with completion of homework assignments and individual projects, taping texts, drill and practice of terms and content, etc. The main objective throughout is to complete the class assignments and pass regular course requirements.

Rationale for Model

The basic rationale for this model is that all high school graduates should successfully complete a set of predetermined basic subjects. The model also keeps the LD student with the regular student for socialization.

Effectiveness of Model

This model if often effective in meeting the goal of successful completion of basic high school subjects. For this reason, it is often seen by regular classroom teachers, administrators, parents as the curriculum model of choice. It has proven successful in many secondary program. There are questions, however, that must be considered. Are the subjects that are required appropriate for each student based on his future academic or employment goals? Is the student being taught in such a way that he will be able to acquire new knowledge

independently?

Although completion of the secondary curriculum fulfills an obvious need, some recommend caution with how this approach is utilized (Carlson, 1985; Gearheart & Gearhaert, 1989). The tutorial model may be a short term solution to major difficulties in learning the materials. The student may also become dependent upon the tutor for learning and this may, therefore, further the student's learned helplessness (Gearheart & Gearheart, 1989). As the student prepares for transition to the world of work, will there be any carryover of what was learned in high school that will help him meet the personal and job related demands of adulthood? Currently, it is estimated that 50-75 percent of all handicapped adults are unemployed (Wehman & Barcus, 1985).

Implications for Secondary Teachers

Secondary teachers who teach in a system where an LD student is given tutorial assistance often act as information givers to the special education teachers. To make the tutorial system effective, the following information is required in a timely manner:

1. **A course outline or syllabus** with a listing of required readings, test dates, assignments and due dates help the tutor monitor and manage study to learn and complete assignments. Students with learning disabilities who require taped texts need about six weeks to order and

receive prepared audio texts.

2. **A list of important concepts and/or terms** to be learned in each chapter should be delivered to the teachers doing tutoring in adequate time for preparation of study guides. If you are following a required state curriculum guide, this may be given to the special education tutor prior to the start of the class. If it specifies the specific content to be learned, this will substitute for teacher's individual listing of key concepts. Secondary teachers who regularly prepare study guides for each chapter may merely furnish them to the special education tutor. It may also be helpful to prioritize the concepts and terms as it may be unreasonable or impossible for the learning disabled student to learn all of them.

3. **Copies of old tests** may be furnished to the tutor. These will provide guidelines to the tutor in helping students prepare for the type of test items used by a specific teacher for a specific course.

4. **Tests may need to be prepared ahead of time** so that modifications may be made for the LD student. These may be made by the regular teacher or the special education tutor. Some of the more common modifications include additional time, reading the test, changing the type of questioning, providing answer sheets for matching, or having someone write the answers for the student.

5. **Sample models of major reports or projects** which

are consistently required will help the special education tutor guide the LD student into adequate completion of long term assignments.

6. **Formal daily or weekly written communication** between the secondary teachers and the special education tutors may be used to monitor student completion of homework, grades achieved, tardiness, preparation for class, effort in class, and test grades, etc. This information will allow for changes to help the LD student be more successful in the regular classroom.

Secondary educators must maintain open lines of communication to have the tutorial model function at an optimal level. This may require some additional effort in communicating with the special education tutor about course content and student progress.

Another implication of the tutorial model is that all students will be included in regular or mainstream classes. Therefore, special effort will be required to insure that all students are able to learn from class presentations. Modifications in presentation are covered in the strategies module.

FUNCTIONAL SKILLS INSTRUCTION MODEL

Description

The functional skills instruction model is designed to "equip students to function in society" (Lerner, 1988,

p. 254). Students are taught the skills that will help them "survive" as an independent person. The subjects matter covered includes such things as how to shop, apply for jobs, home management skills, taking care of personal grooming and health needs, as well as basic banking and money management skills (Lerner, 1988; Gearheart & Gearheart, 1989). These individuals may also be given career guidance and counseling.

Rationale for Model

The rationale for this model is that many LD students are thought to be behind their peers in the development of these functional skills (Gearheart & Gearheart, 1989). To be functional members of society, it is presumed that basic survival skills need to be taught directly in school. It is assumed that LD students who tend to be seen as passive learners will not assimilate this information any other way.

Effectiveness of Model

The primary positive effect of this model is that students leave high school with skills that will help them survive in society. Students may also be better prepared to apply and compete for specific jobs after they graduate (Alley & Deshler, 1979). Students who would probably benefit most are those students who have such severe learning disabilities that their basic skills are limited

to the extent that their ability to learn from the regular curriculum would be very limited. These students will probably go on to vocational career preparation programs or immediately into the job force. With the limited functional skills they demonstrate they would not be able to function independently.

The functional curriculum approach is questioned by some (Alley & Deshler, 1979; Gearheart & Gearheart, 1989) based on its assumption that the survival skills taught today will be the same survival skills needed in the future. The model also ignores the discrepancy notion of each LD student having both strengths and weaknesses. It does not focus on the student's academic abilities. Some Ld students even attend college with support. These students would not be prepared for this option. Students also typically receive this instruction away from their nonhandicapped peers which prevents normal socialization in the secondary setting.

Implications for Secondary Teachers

Secondary teachers play a minimal role in the provision of functional curriculum. Occasionally, alternative classes are set up to supplement the standard English or math requirements. These courses are sometimes taught by the regular education teachers. Such courses as Business Math, Life Skills English, or what is sometimes coined "bone-head" math would be examples. In these

cases, alternative texts are used focusing on the functional aspects of English or math. Teachers of home economics or shop classes may also become involved in the delivery of a functional curriculum.

More often, however, functional skills are taught by the special education personnel in the confines of the special education environment and, increasingly, in out-of-school, real-life environments. In these cases, regular secondary teachers play a minimal role.

WORK-STUDY CURRICULUM MODEL

Description

The work study model focuses on training an individual LD student for a specific job upon completion of high school (Alley & Deshler, 1979). This involves spending part of the school day in the regular high school learning skills that are compatible with the intended career. The remainder of the day is spent on an actual job site with a job coach or in supported vocational education placements.

Rationale

A small percentage of students with learning disabilities actually go on to and are successful in higher education settings. Because of this, it seems advisable to prepare the students for what will follow their high school experience. Typically, this is either a

vocational program or an actual job (Gearheart & Gearheart, 1989). Since the regular curriculum may be inappropriate for the student, this model provides an alternative that will lead to smooth transition into adulthood.

Effectiveness of the Model

This model is positive in that it may stop a student with learning disabilities from dropping out of school. With a change in expectations and curriculum content, the student may feel successful and motivated. Students also are able to see the direct application of what they are doing to benefit them after they graduate.

Currently, there is a strong push to use the work study model for secondary students over 16 years of age. In South Dakota, there is a specific curriculum which has been designed for this purpose. It is called the STEP program which includes three phases. The first phase focuses on getting along with others and communication skills. The second phase covers job related skills such as applying for a job and responsibility on the job site. The third phase includes actual on the job training.

These types of programs have been received with "enthusiasm" in many schools (Gearheart & Gearheart, 1989). Placements for students with learning disabilities often require high levels of performance. Students are able to meet these demands if jobs are selected that

capitalize on their strengths.

Implications for Secondary Teachers

Regular secondary teachers play a minimal role in the education of students who are currently in a work-study curriculum model. This is particularly true for some content area teachers. The reason is that the work-study time on the job is used to substitute for the traditional credits a high school student would earn. Therefore, the students may not be taking many of the typical high school courses.

High school teachers who teach courses that might be considered pre-vocational may be deeply involved in the education of students in a work-study program. High schools that provide courses such as agriculture, food services, home economics, typing, shop courses, etc. provide classroom instruction that is valuable in training a student specifically for a job he can pursue upon graduation. These teachers can work closely with the special education personnel in preparing the student for his on the job experiences.

LEARNING STRATEGIES CURRICULUM MODEL

Description

The cognitive learning strategies model, first

proposed by Alley and Deshler (1979), attempts to teach students how to learn rather than focusing on learning specific content information. Strategies are "defined as techniques, principles, or rules that facilitate the acquisition, manipulation, integration, storage, and retrieval of information across situations and settings" (Alley & Deshler, 1979, p. 13). In this model, students are typically taught specific learning strategies in a special education resource room setting during part of the day placements. The rest of the day is spent in the regular curriculum courses with nonhandicapped students. Students are asked to apply those strategies to learning easy material in the resource rooms and then use the same strategies to learn the regular high school curriculum materials.

Ellis and Lenz (1987) have divided the cognitive strategies into six skills areas(Gearheart & Gearheart, 1989). These include *rehearsal strategies*. This can include both verbal and visual rehearsal of information. The second, *transformational strategies*, include strategies which elaborate or embellish information or provide word cues to help students remember the information. The third type, *organizational strategies*, require the student to manipulate the information to make it easier to remember such as in clustering or categorization of information. *Mnemonic strategies* help the student manipulate parts of words to be remembered

through association with new words or using the first letters of the items to be learned in a word or sentence. *Monitoring strategies* help students evaluate their performance and progress toward achieving goals. An example would be the COPS strategy in writing where students are taught to check their written work for capitalization, overall appearance, punctuation and spelling. The final type of strategies are *motivational strategies*. These strategies often involve self-talk and assist the student in directing himself toward appropriate actions.

Learning strategies, as presented above, cover a wide range of skills. Some of the strategies parallel certain academic areas such as math problem solving strategies or essay writing strategies. Other strategies are more general in nature and can be used in all content areas such as verbal and visual forms of memory strategies. The focus with strategies is on making students active rather than passive receivers and senders of information. The strategies attempt to delineate a definable and repeatable process that can be used independently to meet the demands of the regular curriculum. Examples of these strategies will be covered in depth in the instructional module that accompanies this one. These strategies are often helpful for the nonhandicapped as well as handicapped learners.

Rationale for Model

The basic philosophy for the strategies model can be summed up in the old adage "Give me a fish and I will eat for a day. Teach me to fish and I will eat for a lifetime" (Alley & Deshler, 1979). Instead of attempting to specifically teach the students the regular content (as in the tutorial model), students are given the tools or strategies to independently learn new information. The content taught in today's high schools is soon out of date. Students need the tools to continually acquire new information to keep up with the changing demands of society.

Effectiveness of Model

The strategies model is gaining strength as the model of choice in many secondary settings. It allows the student with learning disabilities to complete the typical curriculum and achieve the credits necessary for graduation. These students also have the necessary strategies to go on to higher education, either vocational or four year degree program. The notion of strategies goes beyond that of higher education and provides the student with the ability to adapt to the changes that occur in our society as outlined by Rogers (1976).

The primary drawback of the strategies model is that it is designed for students who have at least third grade level achievement in the basic skills. Some students with learning disabilities do not meet this requirement and,

therefore, would not benefit from this approach.

Implications for Secondary Teachers

The primary implication for secondary teachers is that these students in the learning strategies curriculum will be enrolled in the regular high school classes. These students will not necessarily have the basic skills of reading, writing, and arithmetic commensurate with nonhandicapped students. Through the use of the strategies they will compensate for their deficient areas to learn the information presented.

Secondary teachers have a responsibility to do the following to assist the learning disabled student in being successful in the mainstreamed classes.

1. Secondary teachers should be aware of the strategies the LD students have learned so they can help the student decide when to employ the strategies.

2. Communicate regularly with the special education teachers to help evaluate if the students are able to generalize the strategies they have learned in the resource setting.

3. Some teaching strategies parallel the learning strategies used by the students and, therefore, these are frequently used to compliment the typical presentation format. An example would be the use of cognitive maps where key points are outlined on the board in a visual representation.

CURRICULUM MATERIAL MODIFICATIONS

Regardless of the model used, there may need to be modifications made in selection of appropriate curriculum materials to be used with these students. Some students are able to understand the curriculum content but are unable to read the course text. One appropriate modification is to select a text which covers the same content but at a lower reading level.

A second option is to combine the current text with other types of instructional materials which enlist the use of multiple senses. Examples of such materials include films, filmstrips, filmloops, study prints, audio tapes, and various experimental or experiential materials.

Modified materials may also be needed for assignments and tests. These can be presented with fewer tasks or questions. Changing from objective to essay types of questions or vice versa may help some students. Each assignment can be designed to cover just one topic. Many LD students have difficulty when information is presented and no mastery learning required. These students tend to learn more if one topic is learned in depth prior to going on to another topic. An example would be a high school algebra text that will present things in a spiral fashion, first teaching three concepts and then returning to the

initial concept later and reviewing. Response requirements may be changed from written to having the student say his answers into a tape recorder or using another student as a secretary. These modifications which change the sequence or types of assignments or tests but still require the student to learn the same content do not need to be noted on a student's file because the student is still responsible for learning the regular content.

Another type of modification is self-checking materials. Some of these materials come in computer format and others come in a workbook format. These materials allow the student to get immediate feedback about responses to items. They are programmed to allow the student to work with minimal teacher supervision while learning the standard class content.

When LD students use alternative curriculum materials but are held responsible for regular class content, teachers do not need to indicate these changes on the cumulative record. When, however, students are not required to learn the important or essential concepts of the class, most districts require teachers to note this on the report card or cumulative record.

THE REGULAR EDUCATION/SPECIAL EDUCATION INITIATIVE

In 1986, Madeleine Will, the Assistant Secretary for OSERS in the U.S. Department of Education, published an adaptation of her address on "Educating Children with Learning Problems: A Shared Responsibility" (Will, 1986). This began what is today called the Regular Education Initiative (REI). In her address, marking ten years since the passage of PL 94:142, Will pointed out her interpretation of special education as a pull out system presuming that children with learning problems cannot be taught in regular education classes. There is minimal research to support this assumption and the majority of research refutes it.

Will (1986) itemized four problems with the current pull out form of special education followed in this country.

1. Eligibility and screening requirements often exclude children in need of support as many students with problems do not fit a specific special education category.

2. Poor performance is often equated with a handicap which results in stigmatizing the students.

3. Special programs focus on failing students, as this is a requirement to secure services, rather than prevention of failure.

4. Parents often view the rules established to be followed in certifying a child to attain services as a

sign of the schools lack of cooperation to serve the needs of the child.

These concerns can be summarized as pointing out a fragmented delivery of services to children with special needs resulting from a dual delivery through regular and special education. To receive these services, students are stigmatized through labeling and removal from their peer group for their education. Parents and schools confront one another on a battleground in securing appropriate placements for students based on handicapping conditions.

Will (1986) makes recommendations for initiating changes in this system. To accomplish needed reform, principals must be given power to secure and coordinate resources to best provide services for all students. Time must be devoted to gather data to measure outcomes of the various types of delivery systems. Early identification and intervention will prepare students to deal with the demands of high school and higher educational settings. Emphasis in assessment should be curriculum based rather than based on the category or label of the handicap exhibited so that teachers can deal with learning strengths and weaknesses. Teachers should be taught to use new instructional methods that have been shown effective for both regular and special education students. In addition, Will emphasized the importance of parental involvement in developing an atmosphere supportive of

academic improvement.

Since this statement was published, numerous articles have been written on the subject of the regular education initiative (see bibliography). Leaders in the field of special education and regular education have voiced both legitimate pro and con arguments about the feasibility and likelihood that the principals extolled in REI will occur. With the increased numbers of students having difficulty with our educational system , now estimated at 20%-30% of the school population (Will, 1986), changes are inevitable. Future secondary teachers must be aware of this movement and equipped to deal with the potentiality of teaching children with mild to moderate learning difficulties in their regular classes.

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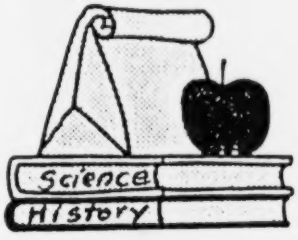
LD CURRICULUM MODELS

OVERHEAD TRANSPARENCIES

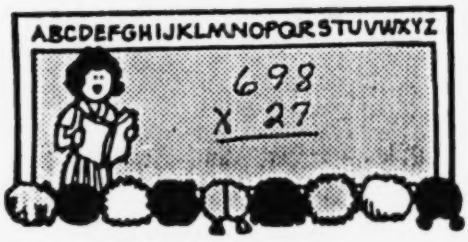
LEARNING
STRATEGIES

WORK-STUDY MODEL

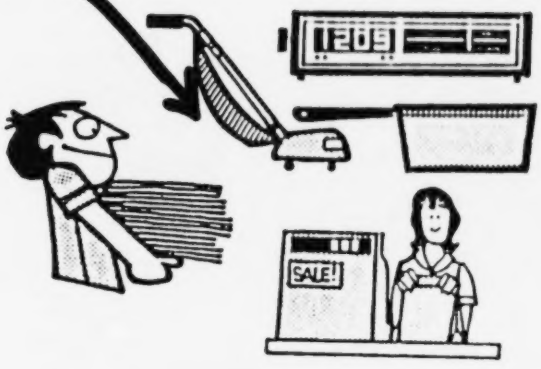


TUTORIAL MODEL

CURRICULUM MODELS
FOR SECONDARY LD
STUDENTS



BASIC SKILLS/
REMEDIATION



FUNCTIONAL
SKILLS

BASIC SKILLS/REMEDIATION MODEL

DESCRIPTION:

* REMEDIAL INSTRUCTION IN BASIC ACADEMIC SKILLS OF READING, ARITHMETIC, SPELLING, AND WRITING

* CRITERION TESTING IS USED TO IDENTIFY THE SPECIFIC WEAK AREAS WHICH ARE REMEDIATED WITH A VARIETY OF TEACHING TECHNIQUES.

* STUDENTS ARE SOMETIMES GROUPED INTO SPECIAL HIGH SCHOOL ENGLISH OR ARITHMETIC CLASSES TO WORK ON THESE WEAK SKILL AREAS TO ACHIEVE A BASIC LEVEL OF COMPETENCY

RATIONALE:

With adequate drill and practice on the basic skills, it is hoped that students will improve enough in these areas to be able to participate independently in high school classes.

EFFECTIVENESS OF MODEL:

* There is little growth in these skills in high school years even with intervention.

* Typical high school students with learning disabilities have reading levels from 3-5th grade and math levels from 5th -7th grade upon graduation.

BASIC SKILLS/REMEDIATION MODEL

IMPLICATIONS FOR SECONDARY TEACHERS:

1. Most of this remedial instruction is done by the special educators in the resource rooms.

2. Some secondary teachers in English and mathematics may be asked to teach special courses for these students to try to teach missing skills in these areas.

3. The focus in these special courses should be on repeated practice of skills until the students know the information with both mastery (accuracy and fluency (speed).

TUTORIAL MODEL

DESCRIPTION:

* DESIGNED TO HELP LD STUDENTS PASS CURRENT CONTENT AREA CLASSES

* SPECIAL EDUCATION TEACHERS PREPARE STUDY GUIDES, MODIFY TESTS, ASSIST WITH HOMEWORK COMPLETION, ASSIST STUDENTS WITH DRILL AND PRACTICE OF COURSE INFORMATION, ETC.

* SPECIAL EDUCATION TEACHERS TUTOR STUDENTS INDIVIDUALLY OR IN SMALL GROUPS TO RETEACH OR DRILL AND PRACTICE ON INFORMATION PRESENTED TO THE STUDENTS IN THE REGULAR CLASSES.

RATIONALE:

This model is specifically designed to help students pass the current courses they are enrolled in so as to achieve the necessary credits for graduation.

EFFECTIVENESS OF MODEL:

* Meets goal for completion of high school credits

* May be a short term solution as students become dependent upon special education teachers for learning and passing courses

TUTORIAL MODEL

IMPLICATIONS FOR SECONDARY TEACHERS

TO ACHIEVE SUCCESS WITH THIS MODEL, SECONDARY TEACHERS MUST PROVIDE THE SPECIAL EDUCATION TEACHERS WITH THE FOLLOWING INFORMATION IN A TIMELY MANNER:

1. COURSE OUTLINE OR SYLLABUS
2. A LIST OF IMPORTANT CONCEPTS/TERMS TO BE LEARNED IN EACH UNIT
3. COPIES OF OLD TESTS
4. TESTS PREPARED PRIOR TO DATE OF TEST
5. SAMPLE MODELS OF MAJOR REPORTS OR PROJECTS
6. WRITTEN COMMUNICATION DESCRIBING STUDENT ASSIGNEMNTS, PROGRESS, HOMEWORK COMPLETION, GRADES, TARDINESS, EFFORT, ETC.

FUNCTIONAL SKILLS MODEL

DESCRIPTION:

* DESIGNED TO EQUIP STUDENTS TO LIVE INDEPENDENTLY AS AN ADULT IN SOCIETY

* INSTRUCTION INCLUDES SUCH THINGS AS HOW TO SHOP, APPLY FOR JOBS, MAINTAIN A HOME, TAKE CARE OF PERSONAL GROOMING AND HEALTH NEEDS, BANKING AND MONEY MANAGEMENT SKILLS, ETC.

RATIONALE FOR MODEL:

* Many LD students are behind their peers in the development of these functional skills.

* To be functional members of society, it is presumed that these basic life skills must be taught directly or will not be learned.

EFFECTIVENESS OF MODEL:

* Students leave high school with skills that will help them survive in society.

* Students may also be better prepared to apply and compete for jobs after they graduate.

* This model is the most effective for those students with such severe learning disabilities that their basic academic and intellectual skills limit them gaining much from the regular high school curriculum.

* Negative aspects of this model are that it assumes survival living skills today will be exactly the same in the future and these students are generally educated away from the nonhandicapped students preventing normal socialization in high school.

FUNCTIONAL SKILLS MODEL

IMPLICATIONS FOR SECONDARY TEACHERS

* REGULAR SECONDARY TEACHERS PLAY A MINIMAL ROLE IN PROVISION OF A FUNCTIONAL CURRICULUM.

* ALTERNATIVE COURSES MAY BE OFFERED BY REGULAR TEACHERS AS PART OF THIS CURRICULUM SUCH AS LIFE SKILLS MATH OR ENGLISH.

* VOCATIONAL TEACHERS OR TEACHERS OF HOME ECONOMICS OR SHOP CLASSES MAY PROVIDE SOME OF THE INSTRUCTION IN THESE FUNCTIONAL SKILLS.

WORK-STUDY MODEL

DESCRIPTION:

* FOCUSES ON TRAINING AN INDIVIDUAL FOR A SPECIFIC JOB UPON COMPLETION OF HIGH SCHOOL

* STUDENT SPENDS PART OF DAY IN THE REGULAR HIGH SCHOOL LEARNING SKILLS COMPATIBLE WITH INTENDED CAREER.

* PART OF THE SCHOOL DAY IS SPENT ON AN ACTUAL JOB SITE WITH A JOB COACH.

* IN SOUTH DAKOTA THERE IS A STATE PROGRAM CALLED STEP TO FACILITATE A WORK-STUDY MODEL IN THE HIGH SCHOOLS.

RATIONALE:

A small percentage of students with learning disabilities actually go on to and are successful in higher education settings. This model provides an alternative that will prepare students for a smooth transition from high school to employment in adulthood.

EFFECTIVENESS OF MODEL:

* This model may stop a student with learning disabilities from dropping out of school.

* Students see direct application of what they are doing to adulthood.

* These programs have been received with "enthusiasm" by both students and schools.

* This model may be too limiting for those LD students with higher intellectual levels who may benefit from four year or vocational programs.

WORK-STUDY MODEL

IMPLICATIONS FOR SECONDARY TEACHERS

* REGULAR SECONDARY TEACHERS PLAY A MINIMAL ROLE IN EDUCATING LD STUDENTS INVOLVED IN A WORK-STUDY MODEL.

* PRE-VOCATIONAL HIGH SCHOOL COURSES SUCH AS THOSE IN AGRICULTURE, HOME ECONOMICS, SHOP, TYPING, ETC. MAY BE USED TO HELP PREPARE STUDENTS FOR THEIR PARTICULAR JOB PLACEMENTS.

* OTHER SECONDARY TEACHERS CAN ASSIST BY EXPLAINING THE RELEVANCE OF INFORMATION PRESENTED TO VARIOUS EMPLOYMENT SITUATIONS.

LEARNING STRATEGIES MODEL

DESCRIPTION:

* TEACHES STUDENTS HOW TO LEARN

* TEACHES STUDENTS HOW TO TAKE IN INFORMATION, STORE INFORMATION, AND RETRIEVE INFORMATION

* EXAMPLES OF STRATEGIES TAUGHT INCLUDE TECHNIQUES TO READ AND REMEMBER INFORMATION FROM TEXTS, MEMORIZE INFORMATION, TAKE NOTES, WRITE PAPERS, AND TAKE TESTS, ETC.

RATIONALE:

* Students are given tools to independently learn new information in school and in life.

EFFECTIVENESS OF MODEL:

* Allows the student with learning disabilities to complete the typical curriculum and achieve credits for graduation.

* Students acquire strategies to learn independently.

* Model is, however, primarily successful for students with reading levels of at least third grade or higher.

* Some students have difficulty generalizing the new skills to their regular classes and using them automatically.

LEARNING STRATEGIES MODEL

IMPLICATIONS FOR SECONDARY TEACHERS

Secondary teachers help by:

1. Identifying learning weaknesses in students and sharing this information with special education teachers.

2. Teaching students some of the learning strategies in class.

3. Presenting lecture materials in a way that facilitates students to use the strategies.

4. Cueing students to use strategies in classes and for specific assignments.

5. Reporting progress to special education teachers on student use of strategies and overall student class performance.

CURRICULUM MATERIAL MODIFICATIONS

*USE A TEXT WRITTEN AT A LOWER READING LEVEL OR AUDIO TAPE THE CURRENT TEXT

*COMBINE MATERIALS TO INCLUDE MULTI-SENSORY EXPERIENCES-USE TEXT WITH A FILMSTRIP, FILM, STUDY PRINTS, AUDIO TAPES, ETC.

*PROVIDE MODIFIED MATERIALS (ASSIGNMENTS/TESTS) WITH FEWER TASKS/QUESTIONS, CONCEPTS, AND/ OR RESPONSE REQUIREMENTS.

*PROVIDE SELF-CHECKING MATERIALS

THE REGULAR EDUCATION/SPECIAL EDUCATION INITIATIVE

BY MADELINE WILL (NOV 1986)

GOAL: SHARED RESPONSIBILITY OF REGULAR AND SPECIAL EDUCATION FOR MILDLY HANDICAPPED CHILDREN

CONCERNS:

Fragmented Approach
Dual Systems
Stigmatization of students
Battleground-Placement

RECOMMENDATIONS:

Increase Instructional Time
Support Regular Ed. Teachers
Principal Power
Use New Instructional Methods

LD CURRICULUM MODELS

ANNOTATED BIBLIOGRAPHY

MODELS OF SERVICE DELIVERY TO LD STUDENTS
ANNOTATED BIBLIOGRAPHY

Bean, T. W., Singer, H., Sorter, J., & Fraze, C. (1986). The effect of metacognitive instruction in outlining and graphic organizer construction on students' comprehension in a tenth grade world history class, Social Studies Education, 18(2), 153-169.

In this research study two groups taught outlining or graphic organizers were compared on recall of history text information on quizzes. Part of the graphic organizer group had also been previously taught summarization and question generation skills. Students were taught to create their own graphic organizers following three steps: finding a topic sentence that united supporting points in a passage, developing a graphic organizer to display the main and supporting ideas, and coming up with a conclusion or generalization statement. Students received guided practice in another class creating organizers in groups which were evaluated by the teacher. In a third class, students were taught through modeling to develop a traditional outline. Dependent measures evaluated were quiz scores, a Likert attitude scale on future applications of the procedures, and a "delayed written recall task" in difficult material. The graphic organizer group with previous summarization instruction outperformed the other two groups which were comparable. The authors hypothesized that long term metacognitive instruction may be critical for successful implementation of new strategies for text recall.

Halpren, A. S. (1985). Transition: A look at the foundation. Exceptional Children, 51(6), 479-486.

This article reviews the transition model of service delivery to secondary students with handicaps. It discusses at length the policies recommended by Madeline Will through the Office of Special Education and Rehabilitative Services (OSERS). The OSERS approach to transition looks at a range of services from no-service or time-limited service to ongoing services. OSERS listed the goal of this model as employment. In a revised model proposed by the authors, community adjustment,is seen as the key with a combination of outcomes including a satisfactory residential environment, social and interpersonal network, and/or employment. The findings of an Oregon study of secondary special education programs are presented in the article. A number of curriculum areas were found to be important for secondary special education including traditional academics, vocational training, independent living skills, and community living skills. In the area of vocational education opportunities there was concern about a push away from vocational coursework and toward "excellence" that focuses only on

traditional academics. In the area of programming, there were identified only minimal links between schools and agencies to further transition programming. In addition, recommendations for the future were presented.

Hymel, G. M., & Guerdy-Hymel, L. (1987). Promoting study skills and test taking techniques. National Association of Secondary School Principals Bulletin, 71(500), 97-100.

This article puts forth a model to promote effective study skills and test taking techniques through a three dimensional curriculum model. In the curricular perspective, their model focuses on the teaching of self-management and organization skills, studying, listening, and notetaking methods and strategies for textbook study. The content also includes vocabulary development, concentration and memory training, thinking skills and test taking skills. A variety of curricular resources are used to meet individual students learning styles. In the instructional/guidance dimension of the model, the strategy instruction is integrated across content areas and taught as separate mini-courses with group guidance. Parents are also informed of these programs. Emphasis is placed on student development of independent and effective study skills. the third dimension focuses on assessment using both formative and summative, norm-referenced and criterion references assessment to measure the effects of the model.

Lloyd, J. W., Crowley, E. P., Kohler, F. W., & Strain, P. S. (1988). Redefining the applied research agenda: Cooperative learning, prereferral, teacher consultation, and peer-mediated interventions. Journal of Learning Disabilities, 21(1), 43-52.

The authors cover the research base regarding the following issues: cooperative learning, prereferral, teacher consultation, and peer mediated intervention (peer tutoring). Although there is research to suggest that these are effective approaches to dealing with students with learning difficulties, the research base does not provide adequate conclusive evidence that these procedures will work with special students in general educational settings. Cooperative learning has demonstrated positive effects in social acceptance of the handicapped. Although research on prereferral teacher assistance teams (TAT) has shown a reduction in children receiving special education placement, and assessment, other research shows that many teachers find the information to not be useful and question the TAT process.
Teacher consultation research has shown inconsistent use of consulting skills by special education teachers, a confusion in defining the role of a teacher consultant in

the schools, and mixed reviews as to its academic effectiveness. Peer mediated instruction is viewed as a viable alternative for regular education because of the lack of strain on teacher time and the effectiveness shown in various research studies. The authors conclude that all of these procedures will be effective to some degree but there remains a strong research need to ascertain when, where, and how to use these procedures effectively.

Locke, E. T., & Abbey, D. E. (1989). A unique equation: Learning strategies + generalization = success. Academic Therapy, 24(5), 569-575.

This article describes a Connecticut program for LD students that has focused on the teaching of automatic and efficient learning strategies. An added component to their program was their effort to ensure generalization of the strategies taught. Their program combines weekly tutorial periods, learning strategy classes, and team teaching in content area classes to foster generalization of the skills taught in other classes. The Kansas LD Institute paraphrasing strategy is taught first in the strategies class and then generalized to the mainstreamed content classes. The mainstream and special teachers meet weekly to map out lesson plans and monthly to review aspects of the program. The students in this program have become more independent and successful in their mainstream classes. This article provided an adaptable model for many secondary settings.

Kerzner-Lipsky, D., & Gartner, A. (1987). Capable of achievement and worthy of respect: Education for handicapped students as if they were full-fledged human beings. Exceptional Children, 53, 69-73.

The authors begin by pointing out specific problems with our current educational system: poor evaluation methods, categorizing students based on political pressures or fads, arbitrary classification systems, funding formulas that encourage misclassifications, poorly used mainstreaming programs and misleading information to parents. Two fundamental issues are purported as the original and ongoing need for two separate educational systems: attitudes regarding the disabled and the design of schools , programs, and funding sources serve the less able in separate programs (i.e. Chapter I and special education classes). P.L. 94-142 does not require separate education programs, but rather, appropriate educational programs. To achieve this goal all teachers must take responsibility for the education of all children. the authors state that we must put our efforts into changing the general educational system rather than promoting our separate service delivery model.

Mastropieri, M. A. & Scruggs, T. E. (1989). Reconstructive elaborations: Strategies for adapting content area information. Academic Therapy, 24(4), 391-406.

This paper covers reconstructive elaborations which is a memory method to help students make new information meaningful. To complete this process students must be taught how to reconstruct the information or term into something that is familiar and can be readily retrieved. The second part involves elaborating it in such a way that the content be linked together. the article demonstrates how to use the keyword memory strategy with a set of social studies information. In teaching and using this memory procedure or technique, the authors recommend daily review of content, teacher clarification of the objective of the lesson, both guided and independent practice, and formative evaluation of the use of the study skill.

Montague, M. (1987). Self-management strategies for job success. Teaching Exceptional Children, 19(2), 74-76.

This article evaluates the problem of social skill deficits of handicapped students that often impedes them from job success. It proposes a method of self-instruction where students are told the steps to a task, learn through teacher modeling how to use self-instruction (talk alouds), and learn the skills through role playing. Students are taught to use cue cards to make sure they complete all tasks. Self-questioning is another form of self management in which students are taught to ask themselves questions to help them maintain appropriate attention to the tasks required. Self-monitoring is third management strategy in which the student uses a checksheet of targeted behaviors and check them off when completed. Self-reinforcement is the last type of self-management presented. In this method students are taught to give themselves rewards for appropriate behaviors. All of these also have potential application for students in regular mainstreamed secondary content classes.

Neubert, D. A. & Foster, J. (1988). Learning disabled students make the transition. Teaching Exceptional Children, 20(3), 42-44.

This article described a means to assist learning disabled students in planning for after high school opportunities. To do this they described a community-based exploration guide which was a five step process. In the first step assessment data is gathered about the student and written into an employability

profile which reflected the student's strengths and weaknesses. In the second step, the student and teacher explore potential job areas. In the third step the teacher attempts to locate potential jobs which fit the student's interests and abilities. The students then conduct interviews at the sites to collect information about the employment opportunities. The students are encouraged to make the contacts and do this on their own. In the fourth step the student and teachers discuss how the various jobs fit the students skills and interests and summarize the exploration activities looking for realistic options. Step five involves seeking training to allow the student to reach a viable option that has been selected.

O'Toole, T. J. (1988). Rights of passage: The Montgomery County transition initiative. The Pointer, 32(3), 7-11.

This article describes a county's efforts to foster the successful transition of high school students to post-secondary employment. A task force charged with this task looked at three areas of concern including school instruction, moving from school to work, and job opportunities. They found that the schools must prepare students for post secondary employment and facilitate this link through parent, community and employer interactions. the task force recommended the need for a transition coordinator, a coordinated point of entry into transition services, and a mechanism to coordinate all services to facilitate this process. To plan for this successful career, they developed a model of parent involvement, assessment, goal development, instruction, and the linking of students/parents to support and service agencies. This preparation for careers begins in Kg and continues through high school in their service delivery model.

Reis, E. M. (1987). Helping secondary learning disabled student study a science text. Clearing House, 61(3), 119-121.

This article promotes the use of a strategies model to help students with learning disabilities study science texts. To do this, six steps are recommended. In the first step students highlight the title, headings, pictures, and italicized words in the chapter while formulating questions about the chapter content. Flow chart outlining is taught and used in the second step to reorganize the text information. In step three, the students are asked to read the first two paragraphs of the chapter. Students generate questions from this reading which are placed on the board and discussed. Using the questions from step three, the teachers shows how the content of the chapter has been subdivided by using a

cloze sentence that the students copy and complete in step four. Students find the headings that show how the topic is divided in step five. Step six involves the students in developing a summary statement through a series of steps. Students restate orally their reading questions, write the answers, reread portions of text and write summaries including headings. A sample text about volcanoes was used to demonstrate the process throughout the article.

Reis, R. & Leon, P. E. (1987). teaching reading and study skills to mildly handicapped learners. The Pointer, 31(2), 41-43.

This article covers the use of previewing and text summarization as important learning strategies for reading and study skills. Previewing helps students use their knowledge to inference and synthesize information. The authors describe a preview as a 300-600 word paragraph which consists of questions and statements to focus the readers' interest and a brief summary of the text. Previewing can activate the minds of passive learners. As teachers read the preview passages, they can stop and tell what one might guess about the reading passage. Text summarization is a follow-up activity after reading a passage. Students first find redundant or unnecessary information. this helps isolate important information. Students classify or collapse key word lists and then collapse whole paragraphs. Students then write summaries by using topic sentences and paraphrasing certain passages into a well written summery paragraph. This skills can be taught to individual students or in groups.

Rice, J. R. (1983). A special science fair: LD children learn what they can do. Science and Children, 20(4), 15-17.

This article describes a class of students with learning disabilities with ages 11-13. The teacher arranged for a science fair for these students. Behavior changes were noted as the students worked on their science projects. They learned to work together and cooperate to solve problems. This change in behavior resulted in increased respect for the teacher and students in the class. The students were able to verbalize a number of things they accomplished including how to make things, work together, meet deadlines, and write reports, etc. The author pointed out a number of advantages to having science fairs for LD students. They allow the students to become actively involved in science, interrelate and use other academic skills with the science content, develop social skills, and be successful. The article presents a positive argument for involving LD students in the school science fair.

Sapon-Shevin, M. (1988). Working towards merger together: Seeing beyond distrust and fear. Teacher Education and Special Education, 11(3), 103-110.

The article raises questions in the continuing discussion of REI (Regular Education Initiative). Some of the issues raised by Sapon-Shevin were whether or not the current special education system was defective and if there was a strong enough research base to about instructional methods to facilitate education merger. Other concerns raised are whether general education is ready and willing to facilitate this change. In addition, as yet, the picture of this new merged system does not exist and when it does it will require a reeducation of both regular & special educators. This will require the participation and commitment of both special and general education. Currently, the author points out, a suspicion or lack of information between these two groups exists. To establish a relationship built on trust, special educators must sensitively approach this issue. Some findings about integration of handicapped include: categorization is harmful, pullout or separate programs do not solve all student problems, excellence in programming requires compliance beyond the letter of the law, collaboration is a better model than expert level consultation, and university faculties of regular and special education should be united through physical space to allow for communication to facilitate discussion and concession in this process. Sapon-Shevin concluded stating "we must work together for the best possible future for our children" (p. 109).

Schirmer, T. A. & Michael, G. P. (1983). Practical help for the long-term learning disabled adolescent. Teaching Exceptional Children, 15(2), 97-101.

The article focuses on the needs of students with learning disabilities who have severe enough needs to prevent them from successfully completing a four year college program. They are placed in a program emphasizing career awareness and life skills. Through the use of work stations, the students receive training in a wide range of skills, from banking and mechanics to transportation. This program has resulted in improved attendance, self-esteem, and problem solving skills.

Schumacker, J. B. & Deshler, D. D. (1988). Implementing the regular education initiative in secondary schools: A different ball game. Journal of Learning Disabilities, 21(1), 36-42.

This article points out the barriers which exist in secondary schools in successfully implementing the regular

education initiative. Some of these are the gap between the skill level of learning disabled students and the demands of secondary setting, the LD students' need for intensive instruction, and the difficulty in providing student centered/individualized instruction in the secondary settings. The authors also propose factors which could enable a better working relationship among special and regular educators to achieve the goals of the regular education initiative.

Serna, L. A. (1989). Implications of student motivation of study skills instruction. Academic Therapy, 24(4), 503-514.

This article presents a perspective on the importance of motivation in the interactive process involved in the teaching of study skills and learning strategies. The author describes motivation, reinforcement, and escape and avoidance behavior. Research was cited that queried what motivated students to complete academic tasks. Students reported to be motivated by a chance for success, fear of failure, or personal interest in the topic. Those who hope for success use any learning strategies that work as they have probably experienced positive reinforcement in their learning history. Fear of failure learners approach this learning situation questioning their abilities. They often learn by rote trying to hide their inadequacies or their lack of deep understanding of the content. These students may have experienced negative reinforcement or punishment in their learning history. They merely learn to avoid disapproval. The personal interest learner is driven by topics that relate to vocational interests. A nonmotivated learner may have had minimal reinforcement in his or her history. they history of failure and frustration may lead to only avoidance behaviors. Some recommendations provided for getting the nonmotivated to learn study skills were to use humor, treat students fairly, teach students goal setting , use shaping, and use errorless learning activities.

Simpson, M. L. (1986). Porpe: A writing strategy for studying and learning in the content areas. Journal of Reading, 29(5), 407-414.

The article presents a learning strategy that can be used to help students learn content area material in such a way as to be capable of completing essay tests. It was developed to reflect current findings about effective readers. The steps to the strategy called PORPE are: P-predict, O-organize, R-Rehearse, P-Practice, and E-Evaluate. After reading the passage students are asked to predict potential essay questions about the content. In the second step, students organize the information by summarizing and synthesizing the ideas. In rehearsal,

students are taught to use recitation and self-testing to develop recall rather than mere recognition of the content information. The practice step has students write the essay answers to the predicted questions with instruction on the correct way to write essays. In the evaluate step students assess the quality of their essays. The author points out a number of applications of the strategy and concludes by saying content teachers can teach the strategy effectively.

Slavin, L. E. (1979). A viable approach for LD/EH students in a biology course. The American Biology Teacher, 41(3), 164-170, 189.

The article describes a biology program for students who are learning disabled and emotionally handicapped. Following due process procedures, students are referred and assessed to determine the existence of a handicap and what the students will need to successfully complete high school. the article described in detail some characteristics and emotional problems that learning disabled students experience as a result of repeated failure. Science teachers were originally having difficulty providing needed special assistance to LD/EH students. Some problems they found were the students' inability to handle less structured activities, long term goal planning problems, attention problems, verbal and written expression problems, poor self concepts and social skills. Mainstreaming biology classes were composed of LD/EH and "normal" students to try out special teaching methods with formative data collection. Classroom resource teacher (CRT) biology classes were also described with a focus on activities from the ISIS Science program. Teaching activities used included discussion, laboratories, films, and filmstrips, games, and field trips. They found the CRT biology classes to be more effective than the integrated classes.

Smith, T.E.C. & Dowdy, C. (1989). The role of study skills the secondary curriculum. Academic Therapy, 24(4), 479-490.

This article points to the teaching of study skills to aid LD students who have difficulties processing information. Some of the study skills that need to be taught include notetaking, reading, and listening which involve the processes of organizing, storing, and retrieving information. Research by the authors in 1988 found that only seven out of 24 IEP's in a secondary school contained goals for study skills. Many LD students were found to lack awareness of their deficient study skills. It was, therefore, recommended that these LD students be given counseling to better understand their learning disabilities. the authors suggest the importance

for regular secondary teachers to include these in their curriculum. Study skills recommended in the input mode include reading and listening for important content, listening for cues, notetaking, reading rate and method flexibility, and reading body language. In the process area, strategies include cognitive mapping, mnemonic techniques, chunking, visualization, testtaking, time management, and verbal mediation. Study skills for output to help the student verbally include skills in clarifying, organizing, and expressing ideas. the same skills are helpful in written expression. Word processors often help this process. In closing, the authors reaffirm the inclusion of study skill strategy instruction in the secondary LD curriculum.

Stainback, W. & Stainbach, S. (1984). A rationale for the merger of special and regular education. Exceptional Children, 51(2), 102-111.

This article was one of the first promoting the merger of special and regular education in an effort to meet the needs of all students whether handicapped or not. It pointed out that all children's traits fall on a continuum of characteristics which should be accounted for educationally. Handicapped and nonhandicapped are not two distinct groups with distinct instructional needs. Therefore, the need for a full system is not present. Good instructional methods can serve all children. it is inefficient to operate two separate systems. It is also expensive to classify children and to duplicate services. The dual system requires students to be categorized to receive services while many students could benefit from these services but are not able to fit the categories.

Stone, C. A. (1989). Improving the effectiveness of disabled students: The role of communicational dynamics. Remedial and Special Education, 10(1), 35-42.

The article points out some of the problems faced by the strategy instruction model such as generalization and long term maintenance of these skills. Not all LD students are strategy deficient according to the author. When strategies are trained in environments apart from the real goals of the skills, these are often not generalized. Vygotsky's research upon which strategy teaching has been built, focused on the development of strategic resolution of specific tasks rather than the teaching of strategies out of the context of their use. Vygotsky had highlighted the importance of adult-child social interaction in this practice to prompt and lead the child toward adoption of the most effective strategy without actually explaining or demonstrating. The two forms of strategy training most commonly used today are cognitive behavior modification

and cognitive/metacognitive/learning strategy training. In cognitive behavior modification the students are drilled and reinforced in the use of steps to accomplish a task rather than being led to develop their own understanding of the ask through interaction. The second method of strategy training also lacks this prompting to self-development of strategies. Vygotskys' focus on communicational dynamics play a minimal emphasis in both approaches. Certain strategy training programs have, however, focused on the Vygotskian model of adult child interaction such as Brown and Palinscar's reciprocal teaching. A number of research issues related to the practice of involving proleptic instruction in strategy instruction end this article.

Taymans, J. M. (1989). Cooperative learning for the learning disabled adolescents. The Pointer, 33(2), 28-32.

The majority of secondary LD students receive the bulk of their education in regular classes and need alternative methods to succeed academically, socially, and vocationally. Cooperative learning may help students achieve these goals. The article describes methods for cooperative learning. Student Teams Achievement Division (STAD) is where students study together in mixed level teams but take individual tests to achieve group/team scores. In Teams-Games-Tournaments (TGT) students study together in mixed level teams but compete with equal ability classmates from other teams for points. Jigsaw involves the students in mixed level groups giving each person something to learn in expert groups and then return to and teach their original group. Secondary students can also learn together or do group investigations. Cooperative learning is helpful for LD students when it involves: interdependent goal structuring with individual accountability, heterogeneous group composition, a group size of about 4, assignment of individual responsibilities based on student abilities, individualized expectations without student isolation and group reward. Cooperative learning results in positive social interactions, acceptance of diversity, and student engagement in appropriate learning activities to lead to independent acquisition of knowledge.

Wehman, P. & Barcus, J. M. (1985). Unemployment among handicapped youth: what is the role of the public schools? Curriculum Development of Exceptional Individuals, 8, 90-99.

The article points out the problems schools are facing with handicapped persons being 50-75% unemployed. This article describes a supported work approach model that will lead to greater job placement and retention of

handicapped students. In facilitating the supported work model one must analyze jobs with frequent turnover and responsibilities that can be met, provide pre-vocational training to assist with some general job demands, and assess students behaviors, parents attitudes and opportunities for transportation. These things will assist in job retention. The second part of the work model in job site training and advocating for the student in acclimating him or her to the setting, behavioral expectations, and socially with colleagues and supervisors. Ongoing assessment is the third critical element. It must be started immediately to avoid major problems. Follow along is the fourth component of the model. Some other issues covered in the article include administrative organizational requirements, community-referenced training, business needs in the community, transportation, and liability. Employment outcomes will be improved if this multi-faceted type of transition programming occurs in secondary schools.

Wehman, P., Kregel, J., & Barcus, J. M. (1985). From school to work: A vocational transition model for handicapped students. Exceptional Children, 52(1), 25-37.

In 1983, the U.S. Commission on Civil Rights estimated that 50-75% of disabled individuals are unemployed. This article proposes a model to avoid this problem through a three strategy vocational model which looks at a functional curriculum a variety of integrated services, and on the job community instruction. The authors recommend a very formalized system that will result in paid employment. The article contains a flow chart which includes the individualized program plan which involves formal transition responsibilities and early planning. The vocational outcomes might include other outcomes than competitive employment such as on work crews or in sheltered work arrangements. Follow-up from one to two years later is necessary for problem solving. this article presents a planning model for schools looking at a full range of transition programming.

Whang, P. L., Fawcett, S. B. & Mathew, R. M. (1984). Teaching job-related social skills to learning disabled adolescents. Analysis and Intervention in Developmental Disabilities, 4, 29-28.

This article review the importance of social skills training for handicapped student in a variety of settings. The article describes a research study where two high school students were trained in social skills in actual employment situations. They looked at six social interactions including giving compliments, accepting instruction and criticism, accepting compliments and

explaining problems to supervisors. The students were observed in role playing situations. The students were trained through reading prepared materials, practice and then feedback. There were study guide questions and they practiced the social skills. They found that this training procedure resulted in marked improvement in the on the job social skills of the two learning disabled students.

Will, M. C. (1986). Education children with learning problems: A shared responsibility. Exceptional Children, 52(5), 411-415.

This article is a summary of a conference presentation made by Will. She was the Assistant Secretary for the Office of Special Education and Rehabilitative SErvices. In her address, Will pointed out four problems with our current system: eligibility requirements miss other children in need of assistance, poor performance is equated with a a handicap resulting in stigmatization, services occur only after failure, and parental misconceptions about school willingness to provide services. She suggests ways to lead to changes in the system such as principal empowerment, early identification, use of new instructional technologies, and parental empowerment. This article has sparked a host of other articles on the idea of the regular education and special education merging.

Wood, K. D. (1988). A guide to reading subject area material. Middle School, 19(3), 24-26.

The article points out the fact that textbooks are the primary source of instruction in most content area secondary classes. Many textbooks are, however, poorly written and organized making it difficult for students to extract critical information. Questions come at the end of chapters and are not generally designed to help the student read the text. A reading road map is described that can help students read a passage efficiently. It helps them to vary their reading speed, respond to questions, and note headings. It is teacher constructed to elicit background knowledge and then actively lead the student through the chapter in an efficient manner. To implement use of the guide teachers will tell the purpose of the map, skim the map matching parts in the text, and then provide carefully guided instruction through the first items. the maps can also be used in a cooperative learning situation. In developing any study guides Wood encourages including a review of the content, creativity in design, and cooperative learning. Students can survey the guide and text while teachers explain and model the purpose and procedures for the guides, monitoring progress and discussing the study guides upon their completion.

Grading and overuse of guides should be avoided according to the author. these guides will, hopefully, help students become independent learners.

Wood, K. D. (1989). Using cooperative learning strategies. Middle School Journal, 20(5), 24-25.

The author points out the faults of earlier forms of teaching such as programmed learning and a diagnostic prescriptive approach as limiting student interactions and teacher demonstration and modeling. Cooperative learning is a way to individualize through selective assignment of student roles and responsibilities within a group. Researchers have shown that students in cooperative learning groups achieve higher scores than when taught by other methods. There are also positive effects on motivation, social interactions, and acceptance and decreases in negative competition. the author suggests means to facilitate effective cooperative learning. these include developing an atmosphere that is positive and focuses on helping one another, pointing out rules necessary for cooperative learning and arranging effective classroom organization. By specifying group and individual student roles, circulating among groups, and varying grouping strategies teachers will be able to successfully involve students in cooperative learning groups.